Attachment 11.1

Review of Operational Balancing Gas arrangements

Farrier Swier Consulting Pty Ltd

Revised GN21 Plan

ACT and Queanbeyan-Palerang gas network 2021–26

Submission to the Australian Energy Regulator

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evoenergy

Evoenergy

Review of Operational Balancing Gas arrangements

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farrierswier

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[1] Evoenergy is the name of the partnership between Icon Distribution Investments Limited and Jemena Networks (ACT) Pty Ltd).

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Abbreviations

Term	Definition
AER	Australian Energy Regulator
CI	Cumulative imbalance
CLP	Change in Linepack
DI	Daily imbalance
EGP	Eastern Gas Pipeline
GRMBS	Gas Retail Market Business System daily data
GJ	Gigajoule
GTAs	Gas Transportation Agreements
MOS	Market operator service
MSP	Moomba-Sydney Pipeline
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
OBG	Operational Balancing Gas
OBG day	A day when OBG is payable by Users
PIAs	Participant Imbalance Amount swaps
RP	Receipt Point
RMPs	AEMO NSW/ACT Retail Market Procedures
RSA	Reference Services Agreement
STTM	Short Term Trading Market
TJ	Terajoule
UAG	Unaccounted for gas
URAA	User reconciliation adjustment amount (URAA)
User	A retailer licenced to sell gas, or Self-Contracting User (SCU) registered to arrange gas supply to itself

Executive Summary

This report sets out our findings from the review of Evoenergy's current operational balancing gas (OBG) arrangements set out in Annexure 3 of its Reference Services Agreement (RSA). The RSA forms part of Evoenergy's Access Arrangement (AA) approved by the AER.

OBG is the gas that Evoenergy purchases on a day when the quantity of gas injected into the network through the Watson receipt point (RP) is greater than the total of the amounts nominated by Users for delivery to that RP on the gas day. Evoenergy recovers the cost of OBG from Users responsible for the shortfall in nominations. Annexure 3 of the RSA sets out the arrangements for recovering the cost of OBG across Users. OBG is revenue neutral for Evoenergy.

The OBG arrangements have been in place for nearly two decades. Given that the arrangements have been in place for nearly 20 years and that there are now multiple Users, Evoenergy considers that it is appropriate to review whether the current OBG arrangements can be improved.

Evoenergy engaged us to complete the review and as part of our review asked us to interview key stakeholders to understand if they have any concerns with the current OBG arrangements, and to identify potential improvements to the OBG arrangements. We were provided with a wide range of feedback on the current OBG mechanism; some stakeholders focused on how the mechanism works and refinements to it whilst others focused on whether it should be replaced or removed entirely, or on the processes directly related to OBG. Some stakeholders suggested changes that go beyond Evoenergy's OBG arrangements.

We consider that the current mechanism is largely fit for purpose and have identified some changes which may improve the operation of the current arrangements. Some of these are changes that relate directly to OBG (sections 3.3, 3.4), and others are more general, such as providing information and clarity on how the market operates (sections 3.2, 3.5). Our recommendations are summarised in Table 1.1.

Table 1.1: Recommendations on potential improvements

Component	Recommendation / observation	Where covered
Incentives for accurate nominations	We consider that the current incentives to accurately nominate relative to withdrawals are reasonable but provision of more timely information, and improving trading by Users of imbalances, will provide a more holistic set of incentives.	Section 3.2
Combining of receipt points (RPs)	On balance we consider that the OBG methodology should be changed to net a User's daily imbalance across the Hoskinstown and Watson RPs as soon as it is feasible to do so.	Section 3.3
Combining of multiple IDs	We agree with Evoenergy's proposal that Users should be provided with the option of treating multiple market IDs within the same ownership group as a single ID for the purposes of determining OBG. We understand that the largest User that this would most benefit is in the process of transitioning to a single ID already, and so this may reduce the benefit of allowing IDs to be combined.	Section 3.3

Component	Recommendation / observation	Where covered
Drafting	We consider that the following improvements to the description and understanding of the OBG mechanism can be made: • Redraft Annexure 3 to make it more concise and confirm that the current definitions in Annexure 3 are consistent with the AEMO NSW/ACT Retail Market Procedures (RMPs). • Provide worked examples of the (1) Input Quantity scaling methodology for a non-OBG day to show how scaling is applied and (2) for an OBG day to clarify how the OBG methodology works, in Annexure 3 and / or on Evoenergy's website.	Section 3.4
Information disclosure	We agree with Evoenergy that yearly independent sample certification of the OBG calculations to provide assurances to Users that they are accurate will help Users to have confidence in the OBG cost recovery. We consider that the current publicly available information about OBG is limited and can be challenging to digest. Many stakeholders that we spoke with said they would benefit from more information being disclosed to help them better understand and manage their potential OBG liabilities and any cumulative imbalance (CI). We note that disclosure of information to enable informed decisions is an important part of an efficient market and consistent with the NGO, while also recognising that Users have the primary obligation to inform themselves of matters relating to their operations (including their CI). Therefore, we recommend that Evoenergy consider the feasibility of the following: • With regards to time series data, publish: – Non-confidential time series data on OBG (e.g. total OBG cost and volumes compared with total network receipts / consumption) as part of the monthly settlement. Also notify Users promptly after an OBG day is triggered of the total OBG purchased. Explore whether further information can be provided when an OBG day is triggered at an aggregate level which sets out the net imbalance of Watsons and Hoskinston RPs, and the allocated estimated OBG to the User. – Daily nomination and consumption data, by receipt point, to improve market transparency subject to confidentiality concerns. • With regards to information currently available from CABS Webnoms, enable Users to download inputs, withdrawals, OBG and imbalance reports to improve visibility. Also, consider whether further information could be provided ex-CABS, such as daily and non-daily withdrawals. • Explore whether AEMO provides, or is able to provide, daily imbalance (DI) information. If it does, advise Users how they	Section 3.5

Component	Recommendation / observation	Where covered
	can access it. If not, Evoenergy should consider providing to each User the daily CI data that it provides to AEMO. • Prepare a plain English document of what OBG is, how it is calculated, and what affects it, and publish it on Evoenergy's website. We understand that Evoenergy has proposed in its revised AA to replace CABs in financial year (FY 2024 to deal with current shortcomings, and that may present an opportunity to cost effectively implement some of the changes above. While Users are responsible for understanding the regulatory and market frameworks, and for managing their imbalances, we believe it would assist if Evoenergy published a simple document setting out general information about: • How to manage imbalances, including trading of CIs, and potentially daily CIs for each User • Where relevant information is published by AEMO (under the RMPs). We consider that publication of this information is the responsibility of AEMO and suggest that Evoenergy also raise it with AEMO so that AEMO can consider whether it could improve publication of CI information and how to trade imbalances.	

We note that Evoenergy needs to assess the expected costs for implementing the above improvements against the potential benefits to Evoenergy and the Users.

Suggestions raised by stakeholders that go beyond Evoenergy's OBG arrangements (and outside the scope of our review) are set out in chapter 4 for consideration as a potential broader review of alternatives to OBG. These suggestions are summarised in Table 1.2.

Table 1.2: Out of scope feedback on other potential improvements

Component	Recommendation / observation	Where covered
Broader OBG reform	Some stakeholders suggested that Evoenergy should consider options for broader OBG reform that may reduce the need for OBG or for Evoenergy to manage it. An option suggested would be to replace the current OBG arrangements with a mechanism whereby the pipeline operators (e.g. APA and EGP) would balance Evoenergy's network daily. This would be given effect under the pipeline GTAs and would presumably require agreement by all pipeline shippers. It was noted that in addition to changes to the GTAs, there may also be the need for supporting regulatory changes (no consideration has been given to what they might be) and how to deal with Users that do not ship gas to the Watson RP on the Moomba-Sydney Pipeline.	Section 4.1

Component	Recommendation / observation	Where covered
Market mechanism	Could the Evoenergy network become part of the Sydney Short Term Trading Market (STTM) in some capacity, for example, as a large customer? Obviously, a move to the STTM or a similar scheme requires analysis as to whether it is feasible given the small size of the Canberra market and that the Evoenergy network is physically separate from the STTM.	Section 4.2
Changing the approach to purchasing OBG	Whilst procurement does not impact on the OBG methodology set out in Annexure 3 of the RSA, it impacts on the price paid by Users for OBG. We consider that various options may help bring down the cost per GJ for OBG. Some parties thought that the current approach to competitive sourcing was reasonable, but improvements could be considered as follows: • reference of tender outcomes to STTM outcomes • tender based on a margin above pass-through of spot prices and transport charges. An alternate approach could be to establish a simple short term market solution (a simple version of the market operator system (MOS) in the Sydney STTM) to replace the current OBG procurement arrangements. The market would be based on a period up to a month ahead for which Evoenergy would seek commitments from the market for volumes of gas and prices to be used for OBG. A simple bid stack of the offers received would be created which Evoenergy would draw from in order from cheapest to most expensive to meet the OBG requirements. This would likely require a standing arrangement between Evoenergy and Users (or third party suppliers), and to avoid Evoenergy being short may also need an OBG supplier of last resort.	Section 4.3
Improving imbalance management	Under the RSA Users are required to accurately nominate expected withdrawals, to reflect expected customer consumption and also to manage imbalances. Most Users raised concern about their ability to manage and trade out of imbalances. They stated that that they did not have much ability to reduce a cumulative imbalance to close to zero, and there is a risk that when aiming to reduce a positive cumulative imbalance the User may be exposed to OBG. We understand that the primary tool to manage this situation (and avoid OBG) is for Users to request AEMO for a Participant Imbalance Amount swap (PIAs) to adjust their nominations. However, Users suggested that this mechanism was not an effective way to reduce a cumulative imbalance due to the imbalance being attributed only to Canberra (which does not have much trading potential), a historical lack of interest from other Users and that the user reconciliation adjustment amount (URAA) never seems to be a sufficient number to bring the CI back to zero. It was suggested that a mechanism on Evoenergy's network to clear imbalances / OBG could result in a more efficient process. Ideally, such a mechanism would:	Section 4.4

Component	Recommendation / observation	Where covered
	• enable balancing to occur in both directions – i.e. penalty for going above or below – get something like the MOS where a User is penalised if it has a positive imbalance • enable daily management of balancing and allow parties to under nominate (below withdrawals) that help bring balance back to zero, without getting OBG charges. If such a scheme is to be considered, it would need to address the situation where gas is injected to the Watson RP in excess of the quantities nominated by users for that day (which is purchased by Evoenergy as OBG).	
Monitoring nominations	Evoenergy should consider whether it can provide information in relation to mismatches between nominations and consumption which could help users nominate more accurately and help Users minimise OBG. This may help Users - and their customers - benefit from reduced OBG costs.	Section 4.5

1. Introduction

1.1 BACKGROUND

Evoenergy's gas network is subject to economic regulation by the Australian Energy Regulator (AER) under the National Gas Law (NGL) and National Gas Rules (NGR). The AER is currently reviewing revisions to Evoenergy's AA for the period 1 July 2021 to 30 June 2026.

The RSA, which forms part of Evoenergy's AA, sets out the terms and conditions upon which Evoenergy provides its reference services. This includes the current OBG arrangements set out in Annexure 3 which have been in place for nearly two decades. Evoenergy considers it is appropriate to review the OBG arrangements to ensure that they are suitable for the current market. If any improvements are identified, Evoenergy will consider whether the improvements can be reflected in the RSA as part of the AER's current review of its AA.

1.2 OUR SCOPE

Evoenergy asked us to independently review the current OBG arrangements set out in Annexure 3 of its RSA and interview key stakeholders to understand if they have any concerns with the current OBG arrangements, and their suggestions for what improvements can be made to address those concerns. From our review and stakeholder feedback, we identify possible changes to the OBG arrangements being mindful of the size of the gas market served by Evoenergy and the desire to avoid significant implementation, or on-going, capital or operating costs (referred to as the 'review objectives').

An extract of our scope is attached at Appendix A.

1.3 OUR APPROACH TO ASSESSING IMPROVEMENTS

In assessing whether any improvements to the OBG arrangements can be made, we have considered the National Gas Objective (NGO) as stated in the NGL which is:

> ***to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.***

We have interpreted that an improvement to the OBG arrangements will achieve the NGO if it reduces the cost of OBG. This can be achieved by a direct cost reduction or a cost reduction through behavioural change that results from incentives or better information. We consider that this approach is consistent with the review objectives.

1.4 INTERVIEWS

We conducted interviews with staff from the following stakeholders:

1. AGL Wholesale Gas
2. ActewAGL Retail
3. Energy Australia

4. Evoenergy
5. Jemena Asset Management (Jemena, as service provider to Evoenergy)
6. Jemena EGP (owner and operator of the Eastern Gas Pipeline)
7. Origin Energy
8. Weston Energy.

We also contacted APA who had nothing to discuss at this stage but requested that they be kept in the loop.

1.5 STRUCTURE OF THIS REPORT

This report is structured as follows:

1. Chapter 2 provides an overview of Evoenergy's network and its OBG arrangements. It also sets out our approach to assessing possible improvements to the current OBG arrangements and our observations of historical OBG outcomes which we have considered.
2. Chapter 3 sets out stakeholder concerns of the current OBG arrangements, potential improvements to those concerns and our recommendations.
3. In chapter 4 we have set out other matters raised by stakeholders which we think are outside the scope of our review but rather are more in the nature of a broader review of options for dealing with OBG.

2. The current OBG arrangements

This chapter sets out an overview of Evoenergy's network and its OBG arrangements. It also sets out our approach to assessing improvements to the current OBG arrangements and our observations of historical OBG outcomes.

2.1 OVERVIEW OF EVOENERGY'S NETWORK

Evoenergy is the energy networks business of ActewAGL Distribution, which owns and operates the electricity distribution network in the ACT, and the gas distribution networks in the ACT and Queanbeyan-Palerang.[2] ActewAGL Distribution is a partnership of Icon Water Ltd and Jemena Limited through subsidiary companies.

The Evoenergy gas network serves around 150,000 customers, a large majority of whom are residential and small business customers each using less than 10 terajoules (TJ) of gas per year. Over 8,000 terajoules (TJ) of gas were delivered to residential, and commercial and industrial end-users in 2019/20.

There are two points for receipt of gas into the Canberra gas network – the Hoskinstown RP from the EGP, and the Watson RP from the Moomba-Sydney Pipeline (MSP):

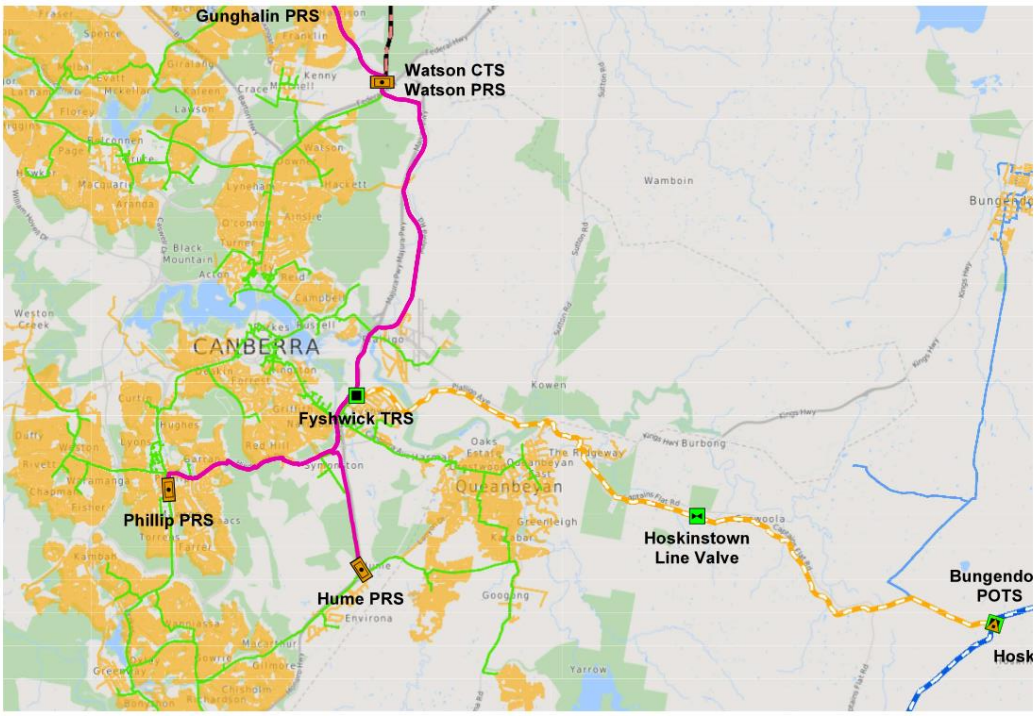
- Hoskinstown RP is flow-controlled and on a day the EGP injects the quantity of gas nominated by Users for injection into the network from the EGP[3]
- Watson RP is pressure-controlled and on a day the MSP injects the quantity of gas required to maintain the pressure in the network.

Figure 2.1 provides a map of Evoenergy's Canberra network, highlighting the two receipt points.

2 Evoenergy also owns the gas distribution network in the Shoalhaven City Council (Nowra) area of NSW. This network is not covered by the AA and the OBG arrangements do not apply to that network.

3 On a daily basis there may be a slight mismatch between nominations and actual injections to the Hoskinstown RP.

Figure 2.1: Map of Evoenergy ACT and Queanbeyan-Palerang gas distribution network



Source: Evoenergy

2.2 PURPOSE OF GAS BALANCING

In essence, a gas network like Evoenergy's Canberra network is a system that must balance inflows and outflows:

- Physically, this happens automatically, with gas injected to the network being delivered to and consumed by end users
- Financially, there are several mechanisms that work together to ensure that the physical flow of gas is accounted for – as the gas must be paid for by someone.

Metering at receipt and delivery points helps the network and its users both monitor the physical flows and reconcile financial accounts. As shown in Figure 2.2, gas receipts must be offset by either consumption, losses (i.e. UAG), or stay within the network (as linepack).

Figure 2.2: Physical balancing

Linepack changes are measured as User imbalances, and Users are required to maintain their cumulative imbalance (CI) close to zero. [4] Imbalances are discussed further below. Linepack changes are allocated to Users as recommended adjustments to Confirmed Nominations. Users are also required to accurately

4 RSA clause 7.3(b)(ii) and (c).

nominate expected withdrawals; that is, forecast withdrawals and nominations of the components of Forecast Requirements must be made by Users on a 'reasonable basis' and 'in good faith' under the RSA.[5]

This formulation of the *physical* balancing is common across networks, although the Evoenergy network is somewhat unusual in having two RP owned by different pipeline operators. What is not common is how gas flows are balanced *financially*. For the Canberra network, the financial balancing involves three key components (as illustrated in Figure 2.2):

- **Confirmed nominations** – which is the amount of gas that the network owner notifies Users that they need to financially bring into the network through either the Watson or Hoskinstown RPs. The process for determining the confirmed nominations is set out in the RSA and involves an initial notification, some adjustments, and then confirmation. In some cases, Users can apply for and Evoenergy may approve changes to the confirmed nominations.
- **Replacement gas** – is the amount of gas that Evoenergy purchases to replace gas that is lost as UAG. This is currently done under a supply gas contract with quantities specified by Evoenergy monthly.
- **Operational balancing gas (or OBG)** – is any additional gas that is injected into the network and purchased by Evoenergy so that total gas receipted into the network is either paid for by Users as nominated or purchased by Evoenergy (either as OBG or replacement gas).

Figure 2.3: Financial balancing

The main cause of OBG is when the total quantity of withdrawals forecast by the Users (which is reflected in their nominations) does not match the total quantity of gas consumed by all end customers in a day.

In effect, OBG is an unintended by-product of Users using the network. In a perfect world there would not be any OBG because each User's nomination would exactly match the amount of gas used by their customers. However, the reality is that it is not possible to accurately forecast end user consumption which means that there will always be some risk that confirmed nominations and replacement gas are insufficient to cover receipts on a day.[6] The lower the Users' forecasts are relative to actual demand, the larger the OBG. OBG can be caused by a shortfall in forecasts from one or more Users.

As well as daily balancing using OBG, financial balancing is also needed over time. This occurs because even if total confirmed nominations were to match total consumption on a given day, it is almost certain that this will not hold at an individual User level. This would occur, for instance, where gas nominated and injected by one User is consumed by end users of another User. Over time, such daily imbalances can lead to positive or negative cumulative balances.

2.3 NOMINATIONS AND DAILY IMBALANCES

Under the RSA and the RMPs, Users are required to manage their injections so that they match the amount consumed by end users. Each day, as Users inject and withdraw gas from the network there is

5 Clause 7.2 c of the RSA and Annexure 3 clause 3.2(b), 4.2 (b) 5.2(a)(iv).

6 UAG also contributes to mismatches but the main driver – particularly for a high quantity of OBG – is differences in nominations compared with withdrawals.

likely to be a DI due to various factors. Users nominate quantities for injection into the network two days in advance.

The accuracy of nominations is affected by several factors, including:

- weather uncertainties
- customer behaviour
- linepack changes.

Nominations on any day may be more or less than the quantity actually injected into the network as injections into the network are determined by the quantity actually consumed by customers or the network (e.g. as UAG or changes in linepack) on the day. DIs can be positive – that is, the User injected more gas into the network than its customers consumed – or negative – where User injected less gas into the network than its customers consumed.

Evoenergy calculates the DI for each participant and provides it to AEMO daily. Allocated OBG is counted as additional input on top of the deemed Input Quantity calculated from nominations when the DI value is calculated, so there is DI credit for being allocated OBG as a network user. [7]

AEMO keeps a running tab of CI[8] as a sum of DIs. AEMO monitors the CI for each User and – on a monthly basis – may instruct Users to reduce balances that are outside of the pre-defined tolerance (i.e. are too far away from zero).[9] We understand that a User can request AEMO to provide DI data at any time and that Evoenergy makes the DI value for each gas day available to the User in the CABS Webnom portal in "Additional Info" tab.

Users can reduce their imbalances by either:

- **Trading them** – with other Users that have an opposite position (e.g. a User with a positive imbalance could trade with a User that has a negative imbalance). Although AEMO will record such trades against the respective balances of the two Users, the trade occurs outside of the market with financial terms agreed between the parties. To facilitate trading, AEMO periodically publishes a list of Users with positive, negative or zero imbalances (without publishing the actual imbalances) and their contact details.
- **Swapping them** – by applying to AEMO for a PIAs, which – if granted – are used to adjust Users confirmed nominations in a way that reduces CI. Under this mechanism, AEMO will seek to match offsetting PIAs applied for by Users so that all PIAs sum to zero on a given day and no financial transaction is involved.[10]

AEMO also receives Evoenergy's change in linepack (CLP) daily quantities for the network section reconciliation equation:

TDQ = TDM + CLP + UAG + NSL (basic metered)

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7 DI is calculated everyday as: Input -Withdrawal= Imbalance; Imbalance-OBG=DI. When OBG flows, the OBG allocated to a User is added to the Input Quantity derived from Confirmed Nominations, to properly account for metered receipts.

8 As Evoenergy is not part of the STTM, the CI currently only applies to the Canberra network.

9 Being the greater of 5 TJ or 30% of the average daily withdrawals over the last month. See: https://aemo.com.au/-/media/files/gas/retail_markets_and_metering/market-procedures/protocol-for-user-cumulative-imbalance-stacks.pdf, page 4.

10 AEMO will only grant PIAs that offset and so may adjust PIAs before doing so – and therefore requires two or more Users. Under this mechanism, User with a positive can bring in less gas on a given day than is needed to serve expected consumption wile a User with a negative CI can bring in more so long as that the net adjustments sum to zero.

Injections = Daily metered + Change in Linepack + Unaccounted for Gas + Net System Load (with NSL being the residual, calculated component).

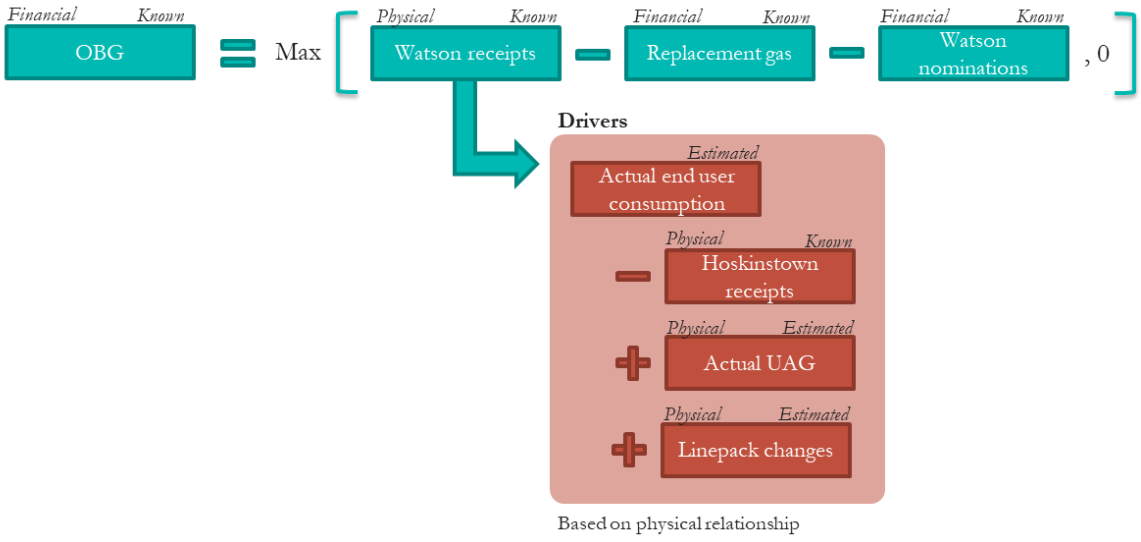
2.4 CALCULATING OPERATIONAL BALANCING GAS

On a day where injections metered through the Watson RP exceed the quantities nominated by Users for delivery through the RP, Evoenergy purchases a quantity of gas equal to the shortfall (net of any replacement gas purchases) – known as OBG. OBG payments under the current OBG arrangements have varied over 2015 to 2020 between $0.5 million and $3 million per annum.[11] Assuming approximately 140,000 customers in the network, this represents between $3.57 to $21.47 per customer per year (the average annual gas bill for residential customers in the network is $1,727[12])..

Evoenergy recovers the cost of OBG from Users according to the methodology set out in Annexure 3 of its RSA. Users are incentivised to avoid OBG where they can, especially given that the price per GJ for OBG is often significantly higher than that available from the spot market. At the same time, as mentioned above, Users must / are encouraged by AEMO to maintain their CI within a specified tolerance.

The calculation of OBG *quantities* is shown in Figure 2.4 below.

Figure 2.4: OBG calculation

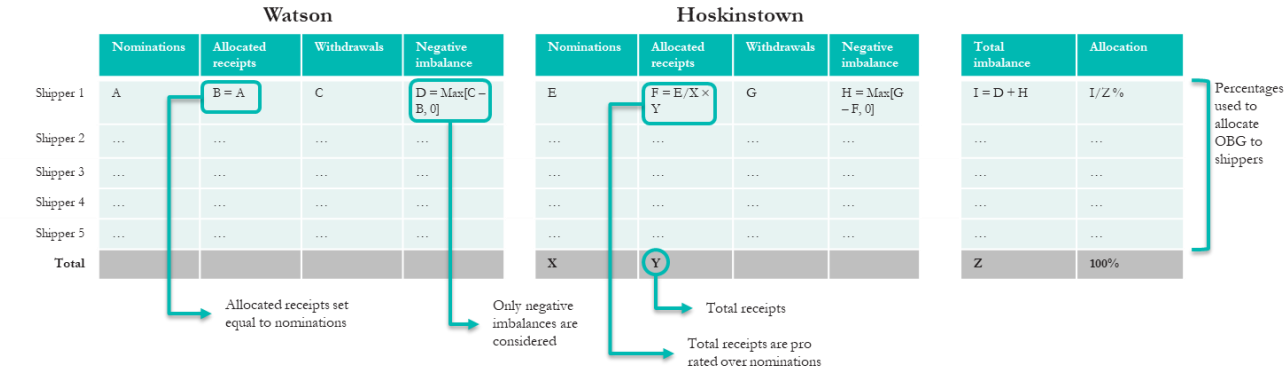


OBG quantities and payments are then allocated to Users using the approach summarised in Figure 2.5, which uses negative DIs at each RP for each User. Although OBG is calculated by looking at receipts and nominations only at the Watson RP, it is allocated across Users by looking at negative DIs across both the Watson and Hoskinstown RPs.

11 Revenue under AA is approximately $60 million per year.

12 Evoenergy gas network 2021 Draft Plan dated Feb 2020 page 13.

Figure 2.5: OBG allocation calculation



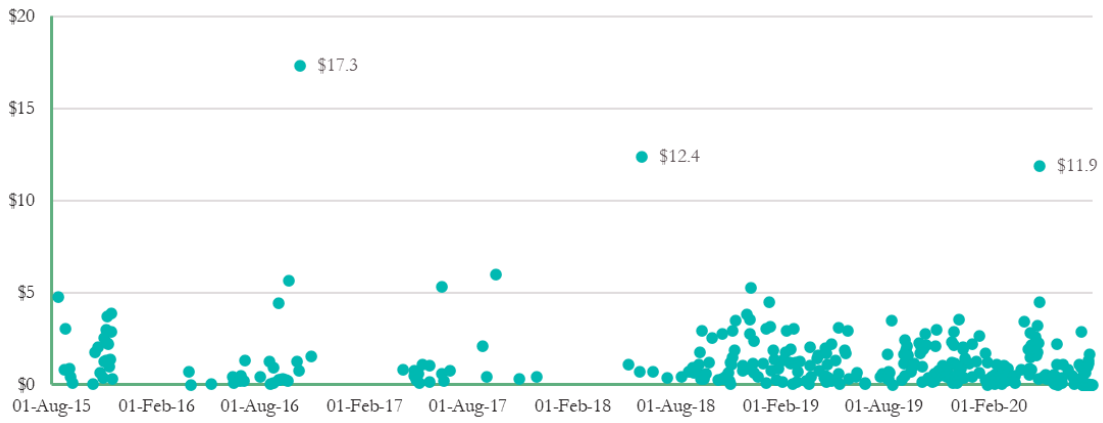
2.5 OUR OBSERVATIONS

To inform our analysis, we have looked at how historical OBG volumes and costs compare over recent years. Based on this, we observe that:

- OBG costs and volumes have been quite high on some days and has varied over time – which suggests that there may be scope to reduce this in the future.
- OBG costs per GJ of gas consumed can be significant, over $1/GJ on many days on the total market GJ for the gas day – which suggests that there may be benefit in seeking to reduce this, either by reducing volumes or finding ways to reduce the cost per GJ of OBG. For example, over nominating can reduce OBG frequency and magnitude.
- The annual cost of OBG has varied significantly (between $0.5 million - $3 million from July 2015 to June 2020).

By way of example, Figure 2.6 shows how the OBG cost per GJ of gas consumed has changed over the period August 2015 to August 2020. Although the frequency of OBG days has changed over time – with a noticeable increase in frequency from July 2018 – the OBG cost per GJ has remained relatively stable. The highest cost per GJ over that period occurred on 10 October 2016 ($17.3/GJ).

Figure 2.6: OBG cost per GJ of consumed gas over time



Source: Jemena data, farrierswier analysis.

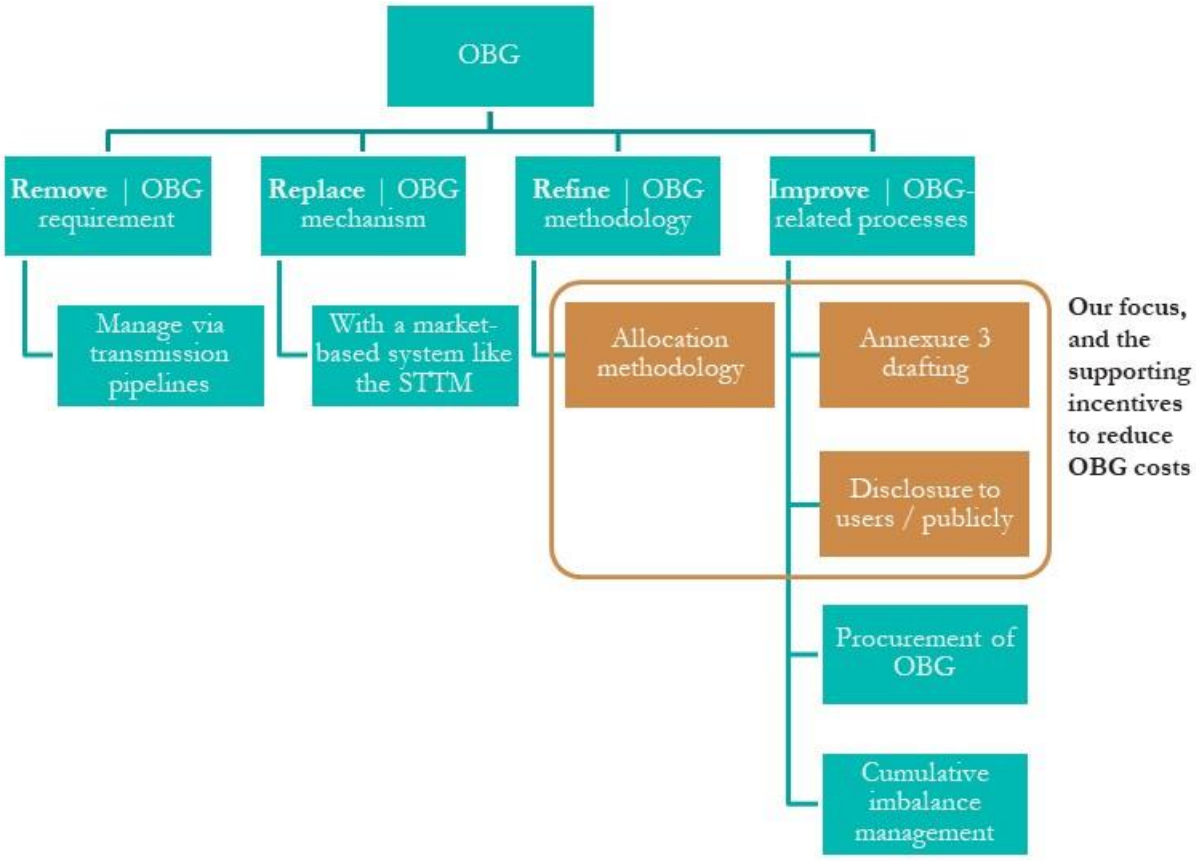
3. Potential improvements to the current OBG arrangements

3.1 OVERVIEW OF FEEDBACK

We were provided with a wide range of feedback on the current OBG mechanism from Evoenergy, Jemena and stakeholders. Some focused on how the mechanism works and refinements to it. Others focused on whether it should be replaced or removed entirely, or on the processes directly related to OBG.

Figure 3.1 categorises that feedback. At one end of the spectrum, at least two stakeholders suggested removing the OBG requirement entirely and instead require the operators of the transmission pipelines that inject into the Canberra network – MSP and the EGP – to manage balancing requirements. At the other end of the spectrum, many stakeholders suggested retaining the arrangements with improvements to the processes and documentation related to the current OBG mechanism.

Figure 3.1: Range of feedback



In the next section we focus on matters being clearly within our scope including the incentives of the OBG arrangements, and concerns raised about the OBG allocation methodology, Annexure 3 drafting and information disclosure. We then cover feedback on the other items shown above in chapter 4.

3.2 INCENTIVES UNDER THE OBG ARRANGEMENTS

3.2.1 Concerns raised

AGL Wholesale Gas noted that the OBG works in one way (covering under nominations not over nominations) and that it might not be the ideal mechanism for a balancing service. In addition, AGL Wholesale Gas doesn't get timely information on whether OBG has been triggered and how much it has cost. Rather such information is provided at monthly settlement which occurs mid-month following month end.

Many parties raised concern about their ability to manage imbalances, which we consider are outside our scope of this review but we deal with in section 4.4.

3.2.2 Users' suggested potential solutions

AGL Wholesale Gas suggested that arrangements similar to the MOS that applies in the STTM – whereby there is a deviation charge for shortfalls of nominations relative to withdrawals and deviation payments when nominations are higher than withdrawals – would provide better and clearer incentives.

3.2.3 Our recommendation

We consider that the OBG arrangements encourage Users to minimise any potential shortfall in nominations relative to withdrawal because of the large OBG cost per GJ (not dissimilar to incentive created by the MOS deviation charge). Whereas when nominations are higher than withdrawals, the incentives of the Evoenergy arrangements are not as clear:

- In the MOS, a User receives a deviation payment which is set at a relatively low price that is less attractive than if the participant had sold or purchased that gas in the ex-ante market.
- In the Evoenergy arrangements, there is no direct price signal but rather the User's positive imbalance will increase (effectively storing value) – which, as discussed in section 4.4, can be relatively difficult for Users to reduce, potentially creating a cost for Users.

We think that for the *existing* incentives to be more transparent and easier to respond to, Users need better and more timely information to enable them to make more meaningful changes to their future nominations to avoid potential OBG for subsequent days (we consider this in information requirements in section 3.5).

With regards to incentives for minimising over nominating relative to withdrawals, the incentives are not as clear as they could be, such as the deviation payment in the MOS, and the current options for Users to reduce any positive imbalance are not ideal. We consider that solutions to this are outside the scope of our review, but we have noted stakeholder concerns and suggested potential solutions in section 4.4.

3.3 OBG ALLOCATION METHODOLOGY

3.3.1 Concerns raised

EnergyAustralia noted that whilst the OBG methodology may have been appropriate when it was set up, it believes that is no longer the case given there are an increased number of Users of the network.

The key general concern of several stakeholders[13] is that the costs of OBG are too high, the method used to allocate it was unclear or inappropriate, and there was lack of transparency of the calculation of the amount payable by a User for OBG. Stakeholders generally want a mechanism which is fair to all parties. They are concerned that they are paying a higher share of OBG than their share of volumes, and that the current methodology is too influenced by the actions of other Users or other factors (e.g. changes in linepack). One User observed that there does not appear to be any or sufficient correlation between under-nominations and the OBG allocations on a daily basis – sometimes Users are allocated more OBG than actually short on a given day (e.g. where changes in linepack are driving OBG). Conversely, on some days Users are allocated less OBG than they were actually short on that day. We note that in part this concern is largely due to a lack of supporting information provided by Evoenergy for OBG days, which we address in section 3.5.

Origin Energy and EnergyAustralia also noted the seasonal nature of OBG, with higher costs over the Christmas and winter periods but without a clear understanding of what drives the higher OBG costs. EnergyAustralia noted that the unpredictability of OBG costs and the complexity of understanding and managing OBG costs could be a potential disincentive for new retailers to enter the Canberra market (we have not sought to confirm this).

Evoenergy, Jemena and some stakeholders[14] noted that under the current methodology a User that nominates injections at both the Hoskinstown and Watson RPs can end up being allocated OBG for a negative imbalance at the Hoskinstown RP when they have a positive imbalance at the Watson RP. This is the case even if their net imbalance across the two RPs is positive. This situation arises because Users are required to notionally allocate ('point') each customer (Delivery Point) to either the Hoskinstown or Watson RP and it appears Users may be less concerned with individual RP nomination outcomes in this situation but rather focus on the net nomination outcome.

Evoenergy and Jemena also noted that the current OBG methodology does not account for some Users having multiple market IDs; that is, each ID is also treated separately. We understand that multiple market IDs appear to have resulted from legacy arrangements, including acquisition of businesses. In some cases, it appears that Users within a group that have multiple market IDs appear to base their nominations on a group outcome, while not recognising that OBG is determined on a market ID basis. We understand that the largest User that has multiple IDs is transitioning to a single ID over the next two years.

Lastly, ActewAGL noted that OBG is not adjusted for differences arising between actual / metered consumption once the mass market meters are read; that is, the OBG is based on actual and estimated meter reads at a point in time. We note that under the current OBG methodology, the OBG calculation comprises actual daily commercial and industrial read data and a combination of actual and estimated data for residential customers at the time the OBG allocation is finalised, usually middle of the month following the period that OBG relates to as part of the monthly settlement process.

3.3.2 Users' suggested potential solutions

Several stakeholders[15] suggested that the allocation of OBG should be based on net DI across the Hoskinstown and Watson RPs rather than the sum of negative imbalances from the two receipt points separately. Evoenergy and Jemena also support this approach, although noting that it may, in certain circumstances, result in a negative impact for a User.

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13 ActewAGL, AGL Wholesale Gas, EnergyAustralia, Origin Energy, Weston Energy.

14 ActewAGL, EnergyAustralia, Weston Energy.

15 ActewAGL, AGL Wholesale Gas, EnergyAustralia, Origin Energy, Weston Energy.

Weston Energy also suggested that imbalances used to allocate total OBG for a month (i.e. the sum of daily OBG amounts) across Users should be assessed monthly rather than daily. The assumed benefit of this approach is that it would partly remove the potential penalty of increased OBG when a User aims to reduce a CI.

ActewAGL noted that for any improvements made, it was important that no customer group was favoured over others, relative to the current arrangements.

In relation to multiple IDs, Evoenergy and Jemena suggested that Users be given the option to consolidate IDs for the purposes of the OBG methodology subject to feasibility as to when to make the change. They considered this preferable to mandating that multiple IDs must be consolidated.

3.3.3 Our recommendation

Based on analysing data over the period July 2018 to August 2020 we have considered the implications of the OBG calculation being based on:

- the net DI across the Hoskinstown and Watson RPs for each ID and for aggregated group IDs
- a monthly rather than daily calculation of the negative imbalances used to allocate OBG for a given month
- combinations of the above.

Our analysis suggests, based on historical data, that:

1. Moving from daily to monthly frequency leads to some significant swings between Users – it also leads to some Users not paying any OBG over that period.

2. Under most options there is some unallocated OBG that arises because there are no negative imbalances to allocate OBG over (e.g. if OBG is caused by increases in linepack) – these amounts are unacceptably high for monthly calculations, indicating that many Users manage to avoid negative balances for some months. This outcome is inconsistent with the intent to pass on the costs to Users that are responsible for the gas shortfalls. Given that OBG costs are determined daily and the large unallocated OBG that results from a monthly allocation, we do not consider that moving away from daily settlement of OBG is workable nor reflective of the drivers of OBG costs.

3. Combining User IDs generally leads to higher OBG costs for some Users and lower for one User. We do not think that the differences are material but note that the OBG allocation on the basis of combined IDs is a better reflection of the total contribution by each User to balancing Evoenergy's network. It will also avoid the need for Users to point each customer (Delivery Point) to either the Hoskinstown or Watson RP.

Importantly, these observations do not factor in potential changes to User behaviour if the allocation methodology was changed. As with the current arrangements, we would expect Users to adjust their behaviour to minimise the costs that they face where reasonable to do so, for instance by improving the accuracy of nominations.

We note that all stakeholders did not believe any of the above changes would result in system changes for them but thought that any changes required would be in Evoenergy's or Jemena's systems. Jemena noted that combining offsetting RP imbalances would require changes in the CABS calculation logic. Jemena expects that this could be a relatively inexpensive change if the additional logic is on top of the existing calculations but that needs to be confirmed as well as being able to implement the changes by 1 July 2021. For changes allowing Users to elect combining their IDs, given that the largest User that this would most benefit is in the process of transitioning to a single ID already this may reduce the benefit of allowing IDs

to be combined. Therefore, the functionality may only be feasible if included as part of the scope of the CABS replacements in FY2024.[16]

In relation to ActewAGL's suggestion about revising the OBG calculation for actual meter reads of residential customers, given the quarterly meter reading cycle for residential and some small business customers, and the relatively small cost of OBG on any one day, we do not consider that updating the OBG calculation for final meter readings will result in material changes in the OBG allocation, nor justify the additional administration in doing so (it would require a recalculation of OBG charges across all network Users for every day on which OBG occurred). We note that the OBG allocation is based on the NSL calculated by AEMO. In addition, Jemena has confirmed that updating for actual meter data would require costly logic changes to CABS.

Allocating the OBG costs to better reflect individual User's contributions made to OBG and how Users operate within Evoenergy's network, along with better and more timely information, is more likely to result in changed behaviour to reduce the gap of nominations being less than withdrawals – and hence OBG costs. Therefore, on balance we consider that the OBG methodology should be maintained but the calculation changed to net a Users' DI across the Hoskinstown and Watson RPs as soon as it is feasible to do so. As part of the CABS replacement in FY2024, consideration should be given to providing Users with the option of treating multiple IDs within the same ownership group as a single ID for the purposes of determining OBG. Our recommendation on information disclosure is in section 3.5.

3.4 DRAFTING IMPROVEMENTS

3.4.1 Concerns raised

Concerns raised with the current Annexure 3 were:

1. It is very legalistic[17]
2. It didn't clearly explain the OBG calculation.[18] In particular, it wasn't clear to some that the OBG allocation is based on both RPs nor how under nominations were used to calculate the OBG volume, and how OBG correlates to imbalances

3.4.2 Users' suggested potential solutions

Several stakeholders[19] noted that the current Annexure 3 drafting could be updated to be clearer, including:

1. Updating definitions and making sure that they align with the RMPs
2. Clearly explain the OBG calculation including that the allocation is based on both RPs. Inclusion of a worked example of how the OBG methodology works would assist in this regard.
3. Jemena suggested that the drafting could better explain the Input Quantity scaling methodology at Hoskinstown and Watson' which occurs on a non-OBG day and an OBG day.

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16 We understand that Evoenergy has proposed in its revised AA to replace CABs in FY24 to will deal with current shortcomings.

17 ActewAGL.

18 ActewAGL, Weston Energy, EnergyAustralia.

19 ActewAGL, Weston Energy, EnergyAustralia.

3.4.3 Our recommendation

We consider that the following drafting improvements could be made to (either to Annexure 3 of the RSA or by publication on Evoenergy's website[20]):

1. Include worked example of the scaling methodology at Hoskinstown and Watson RPs for a non-OBG day.
2. Include a worked example(s) of the OBG methodology (for example, an updated version of figures 2.4 and 2.5). We consider this would assist users to better understand the OBG methodology, and to drive behaviour by the Users to reduce OBG allocations to them, for example, by providing more accurate nominations.
3. Redraft Annexure 3 to make it more concise while retaining the legal intent. The drafting should align with the worked example(s).
4. Confirm that the current definitions in Annexure 3 are consistent with the RMPs.

3.5 INFORMATION DISCLOSURE

3.5.1 Concerns raised

We generally found during our discussions with all stakeholders that there is a lack of complete understanding of the OBG methodology and its inter-relationship with imbalances and linepack. In addition, all external stakeholders stated that there was a lack of time series data associated with daily OBG calculations. This data was not provided as part of the monthly invoice nor was it published by Evoenergy. Some stakeholders noted that there was a lack of notification of when an OBG day occurred. We were not advised that these concerns have previously been raised with Evoenergy.

Stakeholders said that there is also a lack of information on imbalances, including what role Evoenergy has in measuring imbalances and providing information to AEMO, and what role AEMO has in providing information and in monitoring them. Largely this is due to CIs by User not being made public by AEMO, and therefore, it was difficult for Users to trade their CI position with other Users with the aim of both parties aiming to have close to zero imbalance. Although we note that AEMO publishes 'User Cumulative Imbalance CI Stacks' on its website that list Users that have positive, negative or zero CIs and their contact details, it does not publish the size of those imbalances.[21]

At a high level, we understand that:

- Evoenergy provides AEMO daily with preliminary participant DI
- Evoenergy provides AEMO finalised DI after month end
- AEMO calculates participant CI and notifies participants if they exceed the threshold and to take action to bring CI towards zero
- AEMO facilitates PIAs, Imbalance Trades and Imbalance Transfers through B2B platform and maintains an industry contact list.

We understand that the DI is available in CABS Webnoms *Additional Info tab* two days after the gas day. However, we note that stakeholders found CABS difficult to use and that it does not provide the

[20] Recommendations (1) and (2) may be better on Evoenergy's website rather than forming part of the formal, contractual provisions re OBG.

[21] See: https://aemo.com.au/en/energy-systems/gas/gas-retail-markets/procedures-policies-and-guides/new-south-wales-and-act, under the 'Guidelines' heading.

necessary information and services. As mentioned above, we understand that Evoenergy has proposed in its revised AA to replace CABs in FY24 to will deal with current shortcomings, and that may present an opportunity to cost effectively implement some of the changes discussed in this report.

3.5.2 Users' suggested potential solutions

OBG information

Many stakeholders[22] suggested that the monthly invoices should include the total OBG for the days / periods where OBG is charged to a User with the net imbalances (nominations, injections/withdrawals, UAG) and sum of negative imbalances across both RPs for each OBG day.

ActewAGL Retail and AGL Wholesale Gas also suggested that for an OBG day – as soon as practicable after the OBG day – each User should be informed that an OBG day was triggered along with estimates of OBG charged to the User with the net imbalances and sum of negative imbalances across both RPs. AGL Wholesale Gas noted that when an OBG day occurs, information is available from Evoenergy's CABs system but that it was difficult to access and requires daily access to determine whether an OBG day occurred. There is no way to automate the download or upload of information from or to CABs (e.g. using an API). Evoenergy believes it will be relatively simple to modify the system to notify Users promptly after an OBG day is triggered and the total volume of OBG bought.

Several retailers consider that increasing the disclosure and frequency of information will assist Users managing their future nominations to avoid potential OBG payments.

ActewAGL Retail questioned whether all nomination / consumption data can be publicly disclosed (like the STTM) to better facilitate market and OBG transparency.

Some stakeholders noted their preference to use AEMO's systems and processes for information disclosure on the basis that market participants have access to those systems and that their own systems were able to communicate with AEMO's. It was also thought that this would be the least cost option.

Evoenergy and Jemena suggested it may be helpful to provide a yearly independent sample certification of the OBG calculations to provide assurances to Users that they are accurate.

Imbalances

Suggested solutions included:

1. ActewAGL suggested that Evoenergy should consider providing to each User the DI data that is provided to AEMO. AGL Wholesale Gas questioned whether AEMO could provide this information to Users daily.

2. Origin Energy suggested disclosure of User's DI's imbalances to facilitate trades, such as on an online notice board.

General information

Many stakeholders suggested that Evoenergy should publish a fact sheet or some other document that explains, in plain English, what OBG is, how it is calculated, and what affects it (e.g. linepack, imbalances). A worked example could also be published that allows Users and other stakeholders to

22 ActewAGL, AGL Wholesale Gas, Origin Energy, Weston Energy.

understand the OBG calculations. This should be made available on Evoenergy's website and reinforce the requirement for Users to accurately nominate.

We note that some of this information could draw on internal procedures.

3.5.3 Our recommendation

We agree with Evoenergy and Jemena that yearly independent sample certification of the OBG calculations to provide assurances to Users that they are accurate will also help Users to have confidence in the allocation of OBG costs among Users.

We consider that the current publicly available information about OBG is limited and can be challenging to digest. Many stakeholders that we spoke with said they would benefit from more information being disclosed to help them better understand and manage their potential OBG liabilities and any CIs. We note that disclosure of information to enable informed decisions is an important part of an efficient market and consistent with the NGO, while also recognising that Users have the primary obligation to inform themselves of matters relating to their operations (including their CI).

Therefore, we recommend that Evoenergy consider the feasibility of the following:

- With regards to time series data, publish:
  - Non-confidential time series data on OBG (e.g. total OBG cost and volumes compared with total network receipts / consumption) as part of the monthly settlement. Also notify Users promptly after an OBG day is triggered of the total OBG purchased. Explore whether further information can be provided when an OBG day is triggered at an aggregate level which sets out the net imbalance of Watsons and Hoskinston RPs, and the allocated estimated OBG to the User.
  - Daily nomination and consumption data, by receipt point, to improve market transparency. Work will be needed to address or overcome any confidentiality concerns that Users or their customers may have, including NGR restrictions on the publication of user confidential information.
- With regards to information currently available from CABS Webnoms, allow Users to download inputs, withdrawals, OBG and imbalance reports would improve visibility. Also, consider whether further information could be provided ex-CABS, such as daily and non-daily withdrawals.
- Explore whether AEMO provides, or is able to provide, DI information. If it does, advise Users how they can access it. If not, Evoenergy should consider providing to each User the DI data that it provides to AEMO.
- Prepare a plain English document of what OBG is, how it is calculated, and what affects it, and publish it on Evoenergy's website.

While Users are responsible for understanding the regulatory and market frameworks, and for managing their imbalances, we believe it would assist if Evoenergy published a simple document setting out general information about:

- How to manage imbalances, including trading of CIs, and potentially daily CIs for each User
- Where relevant information is published by AEMO (under the RMPs).

We consider that publication of this information is the responsibility of AEMO and suggest that Evoenergy also raise it with AEMO so that AEMO can consider whether it could improve publication of CI information and how to trade imbalances.

Also note that any publication of information by Evoenergy has to maintain confidentiality of confidential User information, and other commercially confidential information (such as the $/GJ payable to the OBG supplier).

4. Other areas for potential improvement

During our discussion with stakeholders, several matters were raised that do not impact on the OBG methodology set out in Annexure 3 of the RSA, and hence the scope of our review. This feedback is provided for Evoenergy to consider along with our recommendations in chapter 3. We note that some of the feedback would take time to implement and are not necessarily matters that Evoenergy can address.

4.1 BROADER OBG REFORM

Stakeholders suggested that Evoenergy should consider options for broader OBG reform that may reduce the need for OBG or for Evoenergy to manage it.

For example, a potential solution would be to replace Evoenergy's OBG mechanism by a mechanism whereby the pipelines (e.g. to APA and EGP) would balance Evoenergy's network daily. This would be given effect under the pipeline Gas Transportation Agreements (GTAs), which we assume will require agreement from all shippers on both pipelines. It was noted that in addition to changes to the GTAs, there may also be the need for supporting regulatory changes and consideration of how to deal with Users that do not ship gas on the MSP to the Watson RP.

AGL Wholesale Gas also noted that at the end of each month participants (excluding the swing shipper) are required to send their OBG data to APA for reconciliation. This is a manual process and would make more sense for the network and APA to communicate directly, provided constraints in relation to confidential information can be addressed.

One stakeholder questioned whether there is an option to convert the Watson RP into a flow-controlled receipt point (noting that this is likely to be an expensive option) at some time in the future. As well as the cost of such a change, we expect that there would be operational considerations such as:

- the need for proportional flow to deal to unexpected changes to demand for gas
- APA only injecting the nominated quantity to Watson RP on any day, which means that Evoenergy would have to curtail customer deliveries on any day where User nominations fell short of customer withdrawals.

Jemena noted that conceptually, the possibility for pipelines to provide the gas to keep the network whole already exists in the RMPs which cover the situation where an Operational Balancing Arrangement (OBA) exists.[23] An OBA is defined in the RMPs as 'an agreement between a Network Operator and the transmission pipeline operators to co-operate in the management of pipeline and network interfaces.'

4.2 MARKET MECHANISM

A few stakeholders[24] questioned whether the Evoenergy network could become part of the Sydney STTM in some capacity, for example, as a large customer. Obviously, a move to the STTM requires analysis as to whether it is feasible given the small size of the Canberra market and the fact that the Canberra network is

[23] See clauses 8.4, 8.5, 8.7, 8.9 and 8.10 of the RMPs. Clause 8.3 covers the transition from no-OBA to an OBA.

[24] ActewAGL Retail, AGL Wholesale Gas, Origin Energy.

not contiguous with the STTM. Treating the Canberra network as a single large customer may still nevertheless require Evoenergy to allocate costs (e.g. MOS) to its Users in some way.

AGL Wholesale Gas stated its preference for consideration of a broader change to introduce a more effective balancing system that could be applied more generically to other pipelines etc where STTM is not feasible. Ideally, the solution should strongly incentivise Users to not increase their DI of gas in the network, nor under-nominate. The solution should provide easier access to data that can help Users understand their injections with their consumption. AGL Wholesale Gas thought that such a mechanism could be based on a combination of the AEMO allocation process in WA (where AEMO tells Dampier Bunbury Pipeline and Parmelia Gas Pipeline whose gas was whose, straight after the gas day) coupled with a STTM MOS mechanism.

AGL Wholesale Gas also noted that market participants (networks, shippers, Users, pipeline operators) are largely set up for STTM type mechanism via AEMO, and therefore, they may just need another data feed depending on how the Canberra network was integrated into the market.

However, it was also noted that if a new STTM-type mechanism was established for Canberra, then it is likely AEMO would need to set up a new market clearing system (likely drawing from the existing STTM system). Evoenergy considers that having Canberra as a separate STTM may be more feasible as extending the Sydney STTM to Canberra means sections of EGP and MSP become part of the hub.

4.3 CHANGING THE APPROACH TO PURCHASING OBG

Whilst procurement does not impact on the OBG methodology set out in Annexure 3 of the RSA, the arrangements entered into by Evoenergy to purchase OBG clearly impacts on the price paid by Users for OBG. We consider that various options may help bring down the cost per GJ for OBG.

Evoenergy's practice is to seek proposals for supply of OBG through a public tender process, open to all retailers in the network and other interested parties.

4.3.1 Concern raised

Generally, stakeholders noted that the cost per GJ of OBG required a premium due to the uncertainty as to the quantity of OBG which may be required on any day, but concern was raised over the level of the premium and lack of transparency of the cost[25] by tranche. AGL Wholesale Gas noted that it is difficult for a supplier to offer OBG over a long horizon given the unknown quantity and the need for flexible (e.g. park) arrangements on the MSP.

4.3.2 Users' suggested possible solutions

Some parties thought that the current approach to competitive tender was reasonable, but improvements could be considered as follows (subject to the cost impact of such changes):

- more than one OBG supplier
- reference of tender outcomes to STTM outcomes
- more frequent tendering / shorter contracts
- tender based on a margin above pass-through of spot prices and transport charges

[25] Evoenergy has confirmed that this information cannot be disclosed as it is commercially sensitive information.

- monthly OBG offer process whereby Users offer OBG for a price and quantity that they are comfortable with that Evoenergy then uses to create a bid stack that it uses to meet its OBG requirements over the month.[26]

Origin Energy suggested a monthly OBG process is likely to work given that Users and gas suppliers have a much clearer understanding of their short term gas positions, and to what extent they have excess gas requirements. Such a mechanism could better promote input from smaller Users that may struggle to offer OBG supply services for a year or more. EnergyAustralia believes that most shippers will have park or loan services with EGP and MSP to enable this to occur and that such a mechanism will provide smaller Users the opportunity to provide OBG. AGL Wholesale Gas and Jemena noted that any mechanism that involves a more frequent procurement arrangement will require standardised terms and conditions (which may be complex), Users will require pipeline transportation services on the MSP, and it may be an administrative burden to manage.

4.4 IMPROVING IMBALANCE MANAGEMENT

4.4.1 Concerns raised

Most stakeholders[27] raised concern about their ability to manage and trade out of imbalances. As stated earlier, while Users are primarily responsible for management of their imbalances in the network, they are unclear on the level of daily CI's, but also that they are unclear on how to trade or financially settle imbalances and who to trade with, and that correcting imbalances requires substantial manual intervention with other parties and reconfiguring MIRNs, and support from AEMO. This means that they did not have much ability to reduce CIs to close to zero, and that there is a risk that when aiming to reduce a positive CI that the User may be exposed to OBG. This risk arises on a day when OBG is payable, and the User has reduced its nominations to reduce its positive CI then the reduced nomination will flow through to an OBG allocation. In addition, Jemena noted that this approach is counter to good-faith nomination of User's requirements.

AGL Wholesale Gas advised that trading imbalance positions was difficult because imbalance is attributed only to Canberra (which does not have much trading potential). It also noted that it has been unsuccessful in trading large CIs in the past due to a lack of interest from other Users. Further, the user reconciliation adjustment amount (URAA) never seems to be a sufficient number to bring the CI back to zero.

It wasn't clear to stakeholders whether Evoenergy manages linepack (e.g. by changing pressure settings) in a way that affects OBG liabilities. In addition, stakeholders also questioned whether Evoenergy could use linepack to help manage imbalances or more actively help facilitate imbalance trades. Evoenergy has advised us that there is limited linepack in its network which provides only a few hours operational safety in the event of an emergency and therefore linepack offers no opportunities for other uses.

4.4.2 Users' suggested possible solutions

AGL Wholesale Gas noted that there should be a mechanism on Evoenergy's network to clear imbalances / OBG in an efficient way. Ideally, such a mechanism would:

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26 EnergyAustralia and Origin Energy suggested this alternate approach. The monthly OBG offer stack could be similar to the STTM MOS - that way all shippers have potential opportunity based on their wholesale gas positions. Under this process standardised terms would be needed to minimise transaction costs for the monthly offering in of OBG. An OBG supplier of last resort may also be needed in the event that the offers, in aggregate, are insufficient to cover OBG requirements over a given month.

27 ActewAGL Retail, AGL Wholesale Gas, Origin Energy, Weston Energy, EnergyAustralia.

- enable balancing to occur in both directions – i.e. penalty for going above or below –something like MOS where Users are penalised if they have a positive imbalance
- enable daily management of balancing and allow parties to under nominate (below withdrawals) that helps to bring balance back to zero, without getting OBG charges.

As set out in sections 2.2 and 3.5, a User can apply to AEMO to offset PIA. Under this process, a User applies to AEMO for PIAs (or swap). If it also receives one or more requests for an offsetting PIA, then AEMO will notify Users of the final PIAs amounts. The notified amounts may be lower than that applied for in order to balance offsetting PIAs so together they net to zero.

Weston Energy questioned whether positive imbalances can be utilised to offset OBG allocations.

4.5 MONITORING NOMINATIONS

4.5.1 Concern raised

ActewAGL questioned to what extent Evoenergy reviews the accuracy of User's nominations with a view to help Users minimise any OBG.

4.5.2 Users' suggested possible solutions

ActewAGL suggested that Evoenergy should consider whether it can more actively monitor mismatches between nominations and consumption and provide greater guidance to Users to help them minimise OBG. This would help Users - and their customers - benefit from reduced OBG costs. It is not clear that Evoenergy has information that would enable it to provide such guidance to Users.

AGL Wholesale Gas suggested that provision of nomination information once nominations are confirmed in some sort of day ahead process (particularly when the aggregate nominations are too large or too low on a pipeline – and potentially allow to readjust positions). Such information could help Users better avoid or minimise actual OBG.

Evoenergy noted that a User should be able to monitor its own nomination performance versus gas withdrawn. Evoenergy could improve visibility of information (as set out in sction 3.5) but we also understand that AEMO provides access to DM and NDM withdrawals through Gas Retail Market Business System (GRMBS) daily data.

Evoenergy notes that worked examples on its website could also assist Users understanding of the OBG arrangements and help to minimise their exposures to OBG.

Appendix A Scope of our review (extract)

A.1 ABOUT OPERATIONAL BALANCING GAS

The purpose of the OBG arrangements is to manage gas imbalances for any day where the quantity of gas delivered through the Watson Receipt Point exceeds the quantity of gas which retailers have nominated to have delivered into the Network through that Receipt Point.

Retailers nominate quantities for delivery into the Network two days in advance. The accuracy of nominations is affected by a number of factors, including weather uncertainties and customer behaviour. Nominations on any day may be more or less than the quantity actually delivered into the Network, as deliveries into the Network is determined by the quantity actually consumed by customers on the day.

There are two points for receipt of gas into the Network – the Hoskinstown Receipt Point from the Eastern Gas Pipeline (EGP), and the Watson Receipt Point from the Moomba-Sydney Pipeline (MSP):

- Hoskinstown is flow-controlled and on a day the EGP delivers the quantity of gas nominated by retailers for delivery into the Network from the EGP.
- Watson is pressure-controlled and on a day the MSP delivers the quantity of gas required to maintain the pressure in the Network.

On a day where deliveries metered through Watson exceed the quantities nominated for delivery at Watson, Evoenergy purchases a quantity of gas equal to the shortfall – that quantity is OBG. Evoenergy recovers the cost of OBG from retailers according to the methodology set out in the Access Arrangement. OBG is revenue neutral for Evoenergy.

The OBG arrangements are set out in the Annexure 3 of the Reference Services Agreement (RSA) which forms part of the Access Arrangement.

A.2 SCOPE OF WORK

The consultancy is to review the current OBG arrangements with a view to identifying whether those arrangements can be improved.

In considering possible changes to the existing arrangements, the review needs to take into account the size of the gas market served by the Network, and the need to avoid significant implementation, or on-going, capital or operating costs.[28]

The review will include consultation with key stakeholders including Network retailers, potential OBG suppliers, Jemena (which provides network management and operations services) and Evoenergy management, and will take into consideration the views of these stakeholders.

As any changes to the OBG arrangements would affect all retailers in the Network, the review must provide sound reasoning and indicative costs for any recommended changes.

[28] Forecast residential and commercial consumption for 2020 in East and South Eastern Australian gas markets was 191 PJ (AEMO State of Gas Opportunities 2020 p.6) compared to Evoenergy demand of 8 PJ.